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# Integrating generic competencies (GCs) into University's compulsory courses: perspectives of lecturers and students

Mashitoh Yaacob\*

*Centre for General Studies, Universiti Kebangsaan Malaysia*

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## Abstract

Recent employability demand on universities to produce graduates with Generic Competencies (GCs) had the universities' lecturers and students rethinking their teaching methods and learning processes, respectively. This paper discusses the perspectives of the lecturers and students of Universiti Kebangsaan Malaysia (UKM) on the integration of GCs into university's compulsory courses, i.e., Ethnic Relation, and Islamic and Asian Civilizations (TITAS), on the issues of the basis of integration; integration ability; operational context; and mechanism of assessment. A set of questionnaire was distributed to 2,500 students and 22 lecturers teaching compulsory courses. Frequency analysis was used to compare the perspectives of lecturers and students. Both categories of respondents agreed that methods of explicit recording and assessment are able to be developed. However, lecturers did not think that GCs are 'naturally occurring' within the existing course structures. Lecturers were also in the opinion of GCs are unable to be integrated into the compulsory courses. Furthermore, they did not view operational context for GCs development is appropriately provided by UKM, and they disagreed on 'the appropriate mechanism is able to be identified by lecturers to assess student's development of GCs.' In contrast with the lecturers' perspectives, it is interesting to see the confidence the students had towards the integration of GCs into the university compulsory courses.

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**Keywords:** Basis of integration Generic; competencies (GCs); integration ability; mechanism of assessment; operational context

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## 1. Introduction

Malaysian Qualification Agency (MQA), an agency responsible for quality assurance of higher education for both the public and the private sectors, has implemented the Malaysian Qualifications Framework (MQF) as a basis for quality assurance of higher education and as the reference point for the criteria and standards for national qualifications. MQF emphasizes eight domains of learning outcomes that include generic competencies (GCs), namely: (a) knowledge; (b) practical skills; (c) social skills and responsibilities; (d) values, attitude and professionalism; (e) communication, leadership and team skills; (f) problem solving and scientific skills; (g) information management and life-long learning skills; and (h) managerial and entrepreneurial skills. The aims of integrating GCs into university curricular are to: (a) support the development of personal, professional and career

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\* Corresponding author. Tel.: +6-019-2635-052; fax: +6-03-8925-2976  
E-mail address: [mash@ukm.my](mailto:mash@ukm.my)

management skills of future graduates; and (b) improve their GCs capability and employability (Nelson, 2002; University of Sydney, 2002).

Integrating GCs into higher education institution's curricular is not an easy task. Issues in integrating such skills into higher education institution's curricular such as Universiti Kebangsaan Malaysia (UKM) centred not only on the planning, implementation, and assessment stages (e.g., difficulty in interpreting and assessing the skills) but are extended to include the issues of logistical problems and lack of available resources for students and lecturers to make sense of the skills they are meant to be learnt and taught, respectively (Shahrin et al., 2009). Thus, this paper discusses the perspectives of lecturers and students on the issues of integrating GCs into compulsory courses offered in UKM, namely: (a) the extent to which this set of competencies provide a suitable basis for integration into university courses, in that whether or not the competencies were 'naturally occurring' within the existing course structures, and whether or not methods are able to be developed to make those competencies explicitly recordable and assessable; (b) the extent to which this set of competencies can be integrated into the courses by individual lecturers during the planning, implementation, and assessment stages; (c) the appropriate operational context where the competency development is expected to occur; and (d) the appropriate mechanism to assess student's development of those competencies. Since both lecturers and students involved directly in such effort, it is interesting to explore the perspectives of the lecturers and students on the issues of integrating the GCs into university compulsory courses.

## 2. Literature Review

The issues of integrating generic competencies (GCs) into university courses have been discussed by many previous researchers taken into account the perspectives of lecturers and students. The first issue of concern is the suitable basis of GCs for integration into university courses. The extent to which generic competencies (GCs) provide a suitable basis for integration into university courses depends mostly on two factors: (a) whether or not the competencies were 'naturally occurring' within the existing university course structures; and (b) whether or not methods are able to be developed to make those competencies explicitly recordable and assessable.

### 2.1 *Naturally Occurring*

Hager & Holland (2006) argued that the set of competencies provide a suitable basis for integration into university courses, in that they were 'naturally occurring' within the existing university course structures. Emphasis in teaching and learning is on how people learn best and GCs are significant components of initiatives to improve teaching and learning. It requires learners to deploy some combination of GCs if they are to be successful. It also the ones that lead to good learning outcomes. Thus, by embedding the development of generic attributes in courses we can improve learning overall. For example, it is natural for us to require learners to deploy GCs such as fluency in communicating their learning experience of Ethnic Relations course through verbal presentation. In this case, we can see communication skill (i.e., one of the GCs) is naturally occurring in the course structures.

### 2.2 *Methods to Record and Assess Generic Competencies*

Research on GCs teaching and learning methods indicates that there is a strong and recurrent link between the development of GCs by learners and methods of teaching and learning. Previous researchers suggest a strategy for explicitly assessing graduate GCs throughout the curricular utilizing a variety of assessment methods. Thus, the lecturers need to ensure that students (Hart et al., 1999): (a) experience a variety of learning experiences; (b) have structured opportunities for reflection and interaction with other students (e.g., peer consultation) throughout the course; and (c) develop profiles of their learning experiences from the commencement of their course programs. Ideally, this individual account of GCs development should be integrated as a core component of the curriculum.

The second issue of concern is the integration ability of GCs into university courses by individual lecturers during the planning, implementation, and assessment stages. Obviously, universities would need a shift in how lecturers handle the planning, implementation and assessment stages of teaching and learning to enable this set of competencies to be integrated into the university courses by individual lecturers.

### 2.3 Planning Stage

The extent to which generic competencies (GCs) provide the ability to be integrated into the university courses by individual lecturers in the planning stage depends on at least four factors. For students to progressively develop GCs, firstly, a shift in teaching and learning practices from a teaching-centred and content-focused transmission model of teaching and learning, to a student-centred and process-focused constructivist model of teaching and learning, is necessary (Campbell et al., 2001). Secondly, it is also depends on whether or not the content of the course and assessment method used matched and appropriate. Thirdly, the ability to identify GCs to be integrated into the university courses by individual lecturers is also important in assuring the integration ability of the GCs into such courses. Last but not least, curricular revision on, especially, the objectives and the learning outcomes of the courses as well as the identification of the type of students involved and resources needed (by both lecturers and students) are also essential in determining whether or not the set of GCs is able to be integrated into the courses.

### 2.4 Implementation Stage

In the implementation stage, the integration ability of the GCs into the courses is largely depending on the teaching and learning methods as well as the techniques used in integrating GCs into the courses. The type of GCs addressed and the type of activities employed to integrate the GCs into the courses are also an important factor to be well considered (Mohd Safarin & Kamaruddin, 2009). The choice of either in-class activities such as classroom discussions, group works, presentations, as well as role play and simulations; or out-door activities such as field assignments, project reports, independent study, field trips and site visits will largely depend on the type of GCs to be instilled, the actual content of the course subjects, the number and type of students, the availability of the resources, and the subject workload credit hours. Another factor that could determine the smoothness of the integration is whether or not GCs modules have been developed and used in the teaching and learning of the competencies. Such modules have been used in several developed countries. Another important factor to be considered is the type of approaches adopted to implement GCs: the diffusion or the infusion models? According to Aini Hussain et al. (2005), previously, most of the higher institutions have applied the diffusion models (or also known as scattered model) such as creative thinking, technical writing, and public speaking etc. in their curricular studies. However, the infusion model approaches is the most suitable and relevant to apply nowadays where the GCs are integrated into the course content. In addition, previous studies found that GCs courses are not very effective, particularly for university and adult students (Hattie et al., 1996). Shahrin et al. (2009) also stated that in the initial phase of implementation stage, only some subjects are identified and ready to be deployed. This is to control on the implementation stage by not over-doing the incorporation of GCs rather than on the main contents of the course subjects.

### 2.5 Assessment Stage

At the assessment stage, the integration ability of the GCs depends mostly on the level of particular GCs able to be assessed. This level is normally referring to the Bloom taxonomy. According to Shahrin et al. (2009), for the overall assessment of course subjects in relation to GCs, a substantial portion of assessment marks must be allocated in order to evaluate rewardingly the demonstration of such skills. Appropriate scores should be given to the criteria demonstrated by students to reflect their importance of effectiveness, orderliness and rankness of such achievements. Presentation, participation, communication, teamwork and problem solving are considered quite easy to assess since the performance criteria are quite straight forward.

Another key factor to be considered in the assessment stage is the tools used for assessing the GCs. There are many methods that are readily available to measure the outcomes of GCs and each method has its own advantages and disadvantages. For example, peer assessment is one of the methods used in assessing team working. By using this method it will somehow relief the burden of the lecturers in assessing GCs such as the team working skills of, especially, a large number of students. However, the results of peer assessment have shown, more often than not, that most of the students generally gave maximum scores to everyone in the group. Perhaps, this is due to the Malaysian cultural society values of helping one another, even though it is noticed that not all members in the group

really participate equally well when executing the given tasks. Thus, some sort of moderation and monitoring by the lecturers is deemed necessary (Shahrin et al. (2009).

With respect to other attributes such as self esteem and integrity, Shahrin et al. (2009) found that not all courses could use peer assessment method since it is difficult to implement and assess, for example in the engineering-based subjects. As a result of this difficulty, such GCs are incorporated into the humanities, management, English language and the co-curricular courses.

The third issue of concern in integrating GCs into university courses is the appropriate operational context provided by the university. Developing appropriate operational context for GCs in a university is vital. Outcome Based Education (OBE), the quantity and quality aspects of human resource, the infrastructures and facilities, and services such as a University Careers Office are amongst the important elements of operational context for GCs.

## *2.6 Outcome Based Education (OBE)*

Outcome Based Education (OBE), which promotes student-centred learning, adopted by UKM creates appropriate operational context in that generic competencies (GCs) add a further dimension to discipline-specific discourse by providing the basis for a consistent terminology for describing course outcomes. The common lack of such consistency, in the higher education sector, means there is no agreed reference point when, for instance, lecturers attempt to develop transdisciplinary courses (Hager & Holland, 2006).

## *2.7 Human Resource*

Human resource in terms of quantity and quality are also important factors in two ways: (a) the implementation of GCs requires lecturers to pay attention to individual students and have an appropriate contact hour with them. This is not possible if the ratio between student and lecturer is too high; and (b) a qualified and well-trained lecturer is vital to infuse or integrate GCs into the curriculum.

## *2.8 Infrastructure and Facilities*

Sufficient and GCs friendly physical infrastructure like lecture halls, seminar rooms, laboratories, etc., are important factors for providing a conducive GCs teaching and learning environment. Similarly, sufficient and fully functioning teaching aids such as computers, LCD projectors, screens, etc., are vital. Last but not least, a reliable GCs assessment system, i.e., generic competencies assessment system is also important.

## *2.9 Services (i.e., University Careers Office)*

University Careers Office is an important unit in a university if the university is really serious about instilling GCs into its graduates so as they are marketable and employable. The Office acts as a source of information on careers and vacancies. The Office provides curriculum vitae workshops, guidance on individual interview skills, and assistance on the cold enquiry letter to companies and prospective employers, sample of typical interview questions, and assistance on coping with difficult questions and assessors' guidelines.

The last, but by no means the least, issue of concern is mechanism of assessment. Two most pressing and in need mechanisms of assessment of GCs would be academic-industry collaboration and variety in assessment methods.

## *2.10 Academic-industry collaboration*

The overall development of generic competencies (GCs) requires a full cooperation, participation and partnership between students, lecturers, universities and the industries. Feedbacks from the industries through surveys and questionnaires to assess the impact of incorporating GCs as needed by the industries, are very much desired for continual improvement and development (Shahrin et al., 2009).

### 2.11 Variety in assessment methods

A varied assessment method is needed to give a better representation of the student performance. Moreover, a better mechanism for communicating and transferring GCs to the students, lecturers, university and industries should also be provided and enhanced to gain an accurate results when doing assessment. According to Hart et al. (1999), only when there are explicit links between university-and professionally-defined graduate competencies, student learning objectives, learning opportunities, and assessment strategies will there be confidence in the quality of the program as a preparation for professional practice. This resemblance is best illustrated in an individualized student profile of experience that complements the transcript of achievement. The student profile of experience facilitates the process of effectively matching individual students to specific graduate employment opportunities. It explicitly addresses the development of desired graduate GCs.

## 3. Methodology

Quantitative approach with a cross-sectional study as research design was adopted in this study as data were collected only at one point of time for the same respondents, and a quantitative survey questionnaire as research instrument was used. A set of questionnaire was distributed to 2,500 UKM's students during class, i.e., from 22 sets of Ethnic Relations class and 24 sets of Islamic and Asian Civilizations [TITAS] class with an average of 70 students per set of class for both courses. The same set of questionnaire was also disseminated to 22 lecturers, i.e., 11 Ethnic Relations lecturers and 11 TITAS lecturers. Hence, the research sample consists of two groups of respondents, i.e., 1,454 UKM students who registered and attended ZZZT1043 and ZZZT1033 courses (i.e., Ethnic Relations, and TITAS, respectively), during the second semester of the 2009-2010 academic session, and nine lecturers who taught the courses. Hence, the response rate of the students was 58.2 percent while the response rate of the lecturers was 40.9 per cent. Of the sample from students, 72.6 percent were female and 27.4 percent were male; 67.1 percent were Malay, 28.3 percent were Chinese, 1.5 percent were Indians and 3.0 percent were 'others', i.e., Bumiputera Sabah and Sarawak, Indonesian, Thai and Sri Lankan; 69.0 percent Muslims, 24.8 percent Buddhists, 4.1 percent Christians, 1.4 percent Hindus, 0.2 percent with no religion, and 0.5 percent 'others', i.e., Catholic, Sikh and Taoist; 99.2 percent at the age of 18-25, 0.6 percent at the age of 26-35, 0.1 percent at the age of 36-45 and 46-55, respectively; and 35.2 percent have been studying in UKM for one year, 38.8 percent for three years, 16.9 percent for four years, 5.7 percent for five years and 3.4 percent for two years. As for the lecturers (all Muslims), 55.6 percent were male and 44.4 percent were female.

The perspectives of lecturers and students on the issues of integrating GCs into university compulsory courses were tapped, i.e., on (a) the extent to which this set of competencies provide a suitable basis for integration into university courses, in that whether or not the competencies were 'naturally occurring' within the existing course structures, and whether or not methods are able to be developed to make those competencies explicitly recordable and assessable; (b) the extent to which this set of competencies can be integrated into the courses by individual lecturers during the planning, implementation, and assessment stages; (c) the appropriate operational context where the competency development is expected to occur; and (d) the appropriate mechanism to assess student's development of those competencies. The survey instrument was based largely on variables found important in the literature on the issues of integrating generic competencies into university courses. Five-likert scale from 1 = strongly disagree to 5 = strongly agree was used in this study. Reliability test amongst lecturers and students was conducted and resulted in the alpha coefficient was well above 0.8 for each variable, ranging from 0.853 to 0.884 amongst lecturers and 0.822 to 0.838 amongst students.

## 4. Results and Discussion

This paper addressed the issues of integrating GCs into university compulsory courses, i.e., the basis of integration, integration ability, operational context, and mechanism of assessment, from the perspectives of lecturers in comparison with the students. The results obtained provided many insights on the issues as well as implications to assist in the future efforts of integrating GCs into university courses.

#### 4.1 The Basis of Integration

Comparative analysis on the perspectives of lecturers and students on the extent to which this set of competencies provide a suitable basis for integration into university courses, in that whether or not the competencies were ‘naturally occurring’ within the existing course structures, and whether or not methods are able to be developed to make those competencies explicitly recordable and assessable resulted in lecturers and students had different opinions on whether or not the competencies were ‘naturally occurring’ within the existing course structures, but both lecturers and students agreed that methods are able to be developed to make those competencies explicitly recordable and assessable. In comparison, a substantial number of students (41.9%) agreed that GCs were ‘naturally occurring’ within the existing course structures of Ethnic Relations and TITAS while the majority of lecturers (55.5%) disagreed. Meanwhile, the majority of both lecturers (55.5%) and students (65.4%) agreed that methods are able to be developed to make GCs explicitly recordable and assessable (Table 1).

Table 1. Perspectives of Lecturers and Students on the Basis of Integration

Statements	Lecturer (%)			Student (%)		
	Agree	Unsure	Disagree	Agree	Unsure	Disagree
1. Generic competencies were ‘naturally occurring’ within the existing course structures of Ethnic Relations and TITAS.	22.2	22.2	55.5	41.9	44.8	13.1
2. Methods are able to be developed to make generic competencies explicitly recordable and assessable.	55.5	22.2	22.2	65.4	26.3	8.1

In comparison with the lecturers’ perspective, it is interesting to see the confidence the students had towards the statement “Generic competencies were ‘naturally occurring’ within the existing course structures of Ethnic Relations and TITAS.” This confidence means, as learners, they were willing to instill some combination of GCs into their learning process, for example, deploying GCs such as fluency in communicating their learning experience of courses through verbal presentation. In this case, we can see communication skill (i.e., one of the GCs) is naturally occurring in the course structures (Hagar & Holland, 2006). Meanwhile, in contrast with Hager & Holland’s (2006) argument that, the competencies were ‘naturally occurring’ within the existing university course structures given that emphasis in teaching and learning is on how people learn best and GCs are significant components of initiatives to improve teaching and learning, lecturers did not view GCs as ‘naturally occurring’ in the existing course structures of Ethnic Relations and TITAS. However, lecturers as well as the students were in the opinions of methods are able to be developed to make those competencies explicitly recordable and assessable although Medlin et al. (2003:63) noted that “traditional university teaching methods do not implicitly result in the development of a broad range of generic [competencies].” This means that the lecturers and students were willing to make the development of GCs explicit in the teaching and learning process, and would venture into utilizing various assessment methods for explicitly assessing GCs. This is also means that the lecturers were willing to ensure that students: (a) experience a variety of learning experiences; (b) have structured opportunities for reflection and interaction with other students (e.g., peer consultation) throughout the course; and (c) develop profiles of their learning experiences from the commencement of their course programs (Hart et al., 1999).

#### 4.2 Integration Ability

The views of lecturers and students differ on the extent to which this set of competencies can be integrated into the courses by individual lecturers during the planning, implementation, and assessment stages. Most of the lecturers were either unsure or in the opinion of generic competencies (GCs) are unable to be integrated by individual lecturers into Ethnic Relations and TITAS courses during the planning, implementation, and assessment stages while the majority of the students were in the opinion of GCs are able to be integrated by individual lecturers into Ethnic Relations and TITAS courses during the planning, implementation, and assessment stages (Table 2).



Table 2: Perspectives of Lecturers and Students on Integration Ability

Generic competencies can be integrated into Ethnic Relations and TITAS courses by individual lecturers during:	Lecturer (%)			Student (%)		
	Agree	Unsure	Disagree	Agree	Unsure	Disagree
1. Planning stage only	22.2	55.6	22.2	40.9	31.2	27.7
2. Implementation stage only	22.2	22.2	55.5	36.5	35.5	27.7
3. Assessment stage only	11.1	44.4	44.4	40.1	31.2	28.2
4. Planning & implementation stages only	22.2	44.4	33.3	41.9	36.2	21.2
5. Planning & assessment stages only	11.1	44.4	44.4	42.6	36.0	21.4
6. Implementation & assessment stages only	22.2	22.2	55.6	42.6	37.1	19.6
7. Planning, implementation & assessment stages	0	33.3	66.7	61.5	27.6	10.7

The lecturers' perspective on the issue of whether or not GCs are able to be integrated by individual lecturers into Ethnic Relations and TITAS courses during the three stages reflects the reluctance to shift from the conventional way of handling the three stages of teaching and learning to a new way which enable GCs to be integrated into the university courses by individual lecturers. The shifts that lecturers were reluctant to make are: (a) from a teaching-centred and content-focused transmission model of teaching and learning to a student-centred and process-focused constructivist model of teaching and learning (Campbell et al., 2001); (b) from pen and paper examination assessment method to an on-going assessment method; (c) from not having to work on identifying GCs to be integrated into the courses to having to work on identifying GCs to be integrated into the courses; (d) from not having to revise the old curriculum to having to revise the curriculum, i.e., the objectives and the learning outcomes of the courses as well as the identification of the type of students involved and resources needed by both lecturers and students; (e) from the traditional teaching and learning methods and techniques to, for instance, mediated instruction, i.e., the teaching and learning of the skills is supplemented with audio and visual materials (Oliva and Henson, 2001); (f) from lecture-based method of teaching to activity-based method of teaching (Mohd Safarin & Kamaruddin, 2009) which would raise another issue, i.e., the choice of either in-class activities such as classroom discussions, group works, presentations, as well as role play and simulations; or out-door activities such as field assignments, project reports, independent study, field trips and site visits will largely depend on the nature of GCs to be instilled, the actual content of the course subjects, the number and type of students, the availability of the resources, and the subject workload credit hours (Shahrin et al., 2009); (g) from not having to develop GCs module to having to develop the module to be used in the teaching and learning of the competencies to provide the basic elements of instruction, i.e., objectives, learning activities, and evaluation as well as the guide to the measurement process of GCs (Krathwohl, 1974); (h) from not having to work on the type of approaches adopted to implement GCs to having to choose between the diffusion model, i.e., also known as scattered model such as creative thinking, technical writing, and public speaking etc (Aini Hussain et al. (2005) and the infusion model, i.e., the GCs are integrated into the course content which allow field-based experiences (i.e., real problems drawn from the physical and social environments of a community to be incorporated into the teaching and learning processes), and make the choice works for GCs bearing in mind that past studies found that GCs courses are not very effective, particularly for university and adult students (Hattie et al., 1996); (i) from not having to allocate a substantial portion of assessment marks for the demonstration of GCs by students to having to allocate such marks; and (j) from not having to identify methods used for assessing the GCs, for instance, peer assessment in assessing team working, to have to identify such assessment methods.

The implementation of GCs reflects the shift in emphasis from content-driven to skill-driven curricula which needs revising of curricula to develop students' generic competencies. The findings (Table 2) showed that the lecturers had not embraced the teaching methods that is not content-focused but process-focused and skill-focused (Medlin et al., 2003).

### 4.3 Operational Context

Developing appropriate operational context for GCs in a university is vital. Outcome Based Education (OBE), the quantity and quality aspects of human resource, the infrastructures and facilities, and services such as a University Careers Office are amongst the important elements of operational context for GCs.

The perspectives of lecturers and students were mixed on whether or not UKM has provided the appropriate operational context where the competency development is expected to occur. Table 3 illustrated that compared to the majority of students the majority of lecturers were not in the opinion of UKM has provided the appropriate operational context where the competency development is expected to occur in terms of: (a) the ratio between student and lecturer as the implementation of GCs requires lecturers to attend to individual students learning and have an appropriate contact hour with them; (b) qualification and training for lecturers to integrate GCs into the curriculum of the courses as the quantity and quality aspects of human resource are important; (c) infrastructures like lecture hall, seminar room and laboratory as they are important for providing a conducive GCs teaching and learning environment; (d) sufficient and fully functioning teaching aids like computer, LCD projector and screen; and (e) a reliable GCs assessment system.

Table 3. Perspectives of Lecturers and Students on Operational Context

Statements	Lecturer (%)			Student (%)		
	Agree	Unsure	Disagree	Agree	Unsure	Disagree
1. Outcome Based Education (OBE) which promotes student-centred learning creates appropriate operational context to operate the development of expected generic competencies.	22.2	55.6	22.2	49.8	39.8	9.2
2. Ratio between student and lecturer is appropriate.	0	0	100	39.8	36.3	23.8
3. Lecturers of Ethnic Relations and TITAS are well qualified and trained for integrating generic competencies into the curriculum of the courses.	22.2	0	77.8	68.1	24.8	6.6
4. Infrastructures like lecture hall, seminar room and laboratory are sufficient and appropriate for teaching and learning of generic competencies.	11.1	11.1	77.8	60.2	17.1	22.5
5. Teaching aids like computer, LCD projector and screen are sufficient and well function.	22.2	22.2	55.6	58.3	14.0	27.6
6. Assessment System of Generic Competencies (SPKG) is reliable.	0	44.4	55.5	31.5	38.2	30.1
7. UKM establishes University Careers Office.	55.5	22.2	22.2	29.7	59.6	8.7

The lecturers are also unsure of whether or not OBE which promotes student-centred learning could create appropriate operational context to operate the development of expected GCs although according to Hager & Holland (2006) OBE provides a framework for GCs in evaluating and assessing course outcomes, and the basis for a consistent terminology for describing course outcomes. On the other hand, students are unsure of whether or not establishing University Careers Office would contribute to appropriate operational context to operate the development of expected GCs while the majority of lecturers are in the opinion of the University Careers Office would contribute to the appropriate operational context. The lecturers view University Careers Office as an important unit in a university for instilling GCs into its graduates so as they are marketable and employable. The Office acts as a source of information on careers and vacancies. The Office provides work readiness programmes, curriculum vitae workshops, guidance on individual interview skills, and assistance on the cold enquiry letter to companies and prospective employers, sample of typical interview questions, and assistance on coping with difficult questions and assessors' guidelines.



#### 4.4 Mechanism of Assessment

Two most pressing and in need mechanisms of assessment of GCs would be academic-industry collaboration and variety in assessment methods. In contrast with the students' opinions, the lecturers disagreed on 'the appropriate mechanism is able to be identified by lecturers to assess student's development of those competencies' (Table 4). Compared to the students, lecturers did not feel that they receive full cooperation and participation from students, colleagues, and industries, and they were unsure about the feedbacks from industries let alone to have industries contribute in assessing GCs of their students via, for instance, workplace-based assessment methods such as direct observation, case-based discussion, mini-peer assessment tool, and procedure-based assessment (Beard et al., 2009). It also means that they were not always aware of what is expected from their graduates by potential employers regarding the skills needed for employment. Hence, it was hard for them to make continual improvement and development of GCs (Shahrin et al., 2009).

Table 4. Perspectives of Lecturers and Students on Mechanism of Assessment

Statements	Lecturer (%)			Student (%)		
	Agree	Unsure	Disagree	Agree	Unsure	Disagree
1. Lecturers received full cooperation and participation from students, colleagues, and industries.	33.3	22.2	44.4	57.8	30.9	11.2
2. Lecturers received feedbacks from industries via surveys to assess the impact from the integration of generic competencies.	0	66.7	33.3	50.9	41.3	7.6
3. Lecturers are using various student assessment methods.	77.8	11.1	11.1	60.5	30.3	9.0

Meanwhile, both lecturers and students were in the agreement that lecturers have made use of various student assessment methods to give a better representation of the student performance but looking at the zero agreement of lecturers on the receipt of feedbacks from industries, in Table 4, it is clear that the various student assessment methods employed were not involving the industries. Hence, lecturers suffered lack of assistance in achieving one of the most important goals of GCs education, i.e., meeting employment opportunities for graduates. Hart et al. (1999) and Medline et al. (2003) believed that by bringing together a range of experts from various stakeholders including the industries would enable the revision of the criteria of assessment for GCs to meet the needs of employer.

#### 5. Conclusion

The perspectives of majority lecturers who: (a) did not view the competencies as 'naturally occurring' within the existing course structures; (b) did not think that the set of competencies can be integrated into the courses by individual lecturers during the planning, implementation, and assessment stages; and (c) did not agree that 'the appropriate mechanism is able to be identified by lecturers to assess student's development of those competencies,' implies that training on integrating GCs into the university compulsory courses is needed as they themselves were in the opinion of they were not well qualified and trained for integrating generic competencies into the curriculum of the courses. In addition, lecturers also did not agree that UKM has provided the appropriate operational context where the competency development is expected to occur. Hence, UKM should seriously looking into providing the appropriate operational context for GCs to develop and consequently meeting the goal of GCs education which is to create marketable and employable graduates. In comparison with the lecturers' perspectives, it is interesting to see the confidence the students had towards the integration of GCs into the university compulsory courses. The issues of integrating generic competencies (GCs) into university compulsory courses have become the concerns of lecturers and students in higher education institutions such as UKM. Hence, their perspectives ought to be taken into account in decisions made for every aspect of the implementation of GCs in higher education institutions. In addition, future research should embark on lecturers' and students' perspectives on integrating GCs into not only compulsory university courses but also other university courses should the infusion method of implementing GCs is to be adopted by the university.

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